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APPLICATION NO. FILIN		ILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO 4429	
10/030,974 0		05/13/2002	Andrea Heilemann	H 4172 PCT/US		
23657	7590	12/01/2004		EXAMINER		
COGNIS C			KRISHNAN, GANAPATHY			
PATENT DI 300 BROOK			ART UNIT	PAPER NUMBER		
AMBLER, PA 19002				1623		
				DATE MAILED: 12/01/2004		

Please find below and/or attached an Office communication concerning this application or proceeding.

	13113-1-13111			<del></del>					
		Application No.	. Al	pplicant(s)					
	Office Anti-or Oceanome	10/030,974		EILEMANN ET AL					
	Office Action Summary	Examiner	Aı	rt Unit					
		Ganapathy Kris		623					
Period fo	The MAILING DATE of this communica or Reply	tion appears on the cove	r sheet with the corr	espondence addi	ress				
THE - Exte after - If the - If NC - Failu Any	IORTENED STATUTORY PERIOD FOR MAILING DATE OF THIS COMMUNICA ensions of time may be available under the provisions of 3 SIX (6) MONTHS from the mailing date of this communication of the period for reply specified above is less than thirty (30) do period for reply is specified above, the maximum statute are to reply within the set or extended period for reply will, reply received by the Office later than three months after led patent term adjustment. See 37 CFR 1.704(b).	ATION.  7 CFR 1.136(a). In no event, how cation.  ays, a reply within the statutory minory period will apply and will expire, by statute, cause the application to	vever, may a reply be timely finimum of thirty (30) days will SIX (6) MONTHS from the roto become ABANDONED (3	filed I be considered timely. mailing date of this com 55 U.S.C. § 133).	imunication.				
Status									
1)	Responsive to communication(s) filed of	on							
2a)⊠		☐ This action is non-fin	al.						
3)□	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.								
Dispositi	ion of Claims								
5) <u>□</u> 6)⊠	Claim(s) 19-38 is/are pending in the application.  4a) Of the above claim(s) is/are withdrawn from consideration.  Claim(s) is/are allowed.  Claim(s) 19-38 is/are rejected.  Claim(s) is/are objected to.  Claim(s) are subject to restriction and/or election requirement.								
Applicati	ion Papers								
9)[	The specification is objected to by the E	xaminer.							
10)	0) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner.								
	Applicant may not request that any objection	n to the drawing(s) be held	in abeyance. See 37	CFR 1.85(a).					
11)	Replacement drawing sheet(s) including the The oath or declaration is objected to by								
	•	the Examiner. Note the	attached Office Act		-102.				
	ınder 35 U.S.C. § 119								
a)[	Acknowledgment is made of a claim for All b) Some * c) None of:  1. Certified copies of the priority doc 2. Certified copies of the priority doc 3. Copies of the certified copies of the application from the International	cuments have been rece cuments have been rece he priority documents ha Bureau (PCT Rule 17.2	eived. vived in Application Nave been received in (a)).	No	age				
3	See the attached detailed Office action fo	or a list of the certified co	pies not received.						
Attachment	u(s)		·						
	e of References Cited (PTO-892)		Interview Summary (PTC	O-413)					
3) 🔲 Inform	e of Draftsperson's Patent Drawing Review (PTO-t nation Disclosure Statement(s) (PTO-1449 or PTC r No(s)/Mail Date	948) D/SB/08) 5) 🔲	Paper No(s)/Mail Date Notice of Informal Patent Other:	<del></del> ,	52)				

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**DETAILED ACTION** 

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The amendment filed 9/17/2004 has been received, entered and carefully considered.

The following information provided in the amendment affects the instant application:

1. Claims 1-18 have been canceled.

2. Claims 19 and 31 have been amended.

3. Remarks drawn to rejections under obviousness-type double patenting, and 35 USC

102(b).

Claims 19-38 are pending in the case. The text of those sections of Title 35, U. S. Code

not included in this action can be found in a prior Office action.

**Double Patenting** 

The obviousness-type double patenting rejection of claims 19-23, 25-26 and 29-37 over

claims 19-25 and 28-37 of copending application No. 10/030933 ('933 application) is being

maintained for reasons of record.

Applicants argue that the claims of the copending '933 application were amended on

February 10, 2004 and are now patentably distinct. Applicants further argue that the claims of

the copending application are drawn to a polysaccharide biopolymer whereas the instant claims

are drawn to chitosan.

This is not found to be persuasive. Chitosan is a polysaccharide biopolymer. Hence, the

claims of the instant application overlap with those of the copending '933 application. Applicants

must file a Terminal Disclaimer to overcome the rejection.

Claim Rejections - 35 USC § 102

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Claims 19-23, 25-28, 32-35 and 37-38 are rejected under 35 U.S.C. 102(b) as being anticipated by JP 01062303 ('302 patent) is maintained for reasons of record.

Applicants argue that the '302 patent teaches slow neutralization of the chitosan salt and is not directed to the production of entangled, three-dimensional, physically cross-linked chitosan product as instantly claimed and that the instant claims as amended are drawn to a process wherein the precipitant is added quickly so as to cause the entanglement and physical cross-linking.

This argument is not found to be persuasive.

The instant claims as amended do not recite addition of the precipitant quickly. They just recite at a rate sufficient to precipitate chitosan such that a crosslinker free chitosan composition having physically entangled strands are formed. The '302 patent teaches that in the neutralization step one may slowly add the aqueous solution of the base. The examples in the '302 patent do not specify a rate of addition of the base either. Hence the addition of the base in the examples and description of the '302 patent is seen as being done at a rate sufficient to precipitate the chitosan having physically entangled strands. Applicants have not shown the criticality of the said precipitation step as instantly claimed. The chitosan of the '302 patent is seen to produce physically entangled strands since the process steps in the '302 patent and those of the instant claims are identical. A declaration showing the difference in the chitosan instantly claimed and that of the '302 patent via a side-by-side comparison of the two chitosans might be more favorably considered.

## Conclusion

Claims 19-38 are rejected

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ganapathy Krishnan whose telephone number is 571-272-0654. The examiner can normally be reached on 8.30am-5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James O. Wilson can be reached on 571-272-0661. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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∕ VAINES U. WILSUN RYISORY PATENT EXAMINER

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